

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/JP2005/012873

International filing date (day/month/year)
06.07.2005

Priority date (day/month/year)
13.07.2004

International Patent Classification (IPC) or both national classification and IPC
H04N7/26

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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ATTACHMENT "D"

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/012873

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/012873

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-3, 10-19
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

- 1 Reference is made to the following document:

D1: EP-A-1 359 763 (MICROSOFT CORPORATION) 5 November 2003 (2003-11-05)

- 2 Claim 1 lacks clarity, contrary to Article 6 PCT as the expression "calculating base values which are bases of sub-pixel values of the sub-pixels" is unclear. The term "base values" does not seem to have any recognised meaning in the art. The definition of said base values, i.e. they are bases of sub-pixel values cannot be understood.

The same applies to the corresponding independent claims 12-19.

In spite of these deficiencies the above claims could however be understood in light of the description.

- 3 Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT, and therefore the criteria of Article 33(1) PCT are not met.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and insofar as this claim can be understood, this document shows the following features thereof (the references in parentheses applying to this document):

A motion compensation method (abstract) comprising:

interpolating sub-pixels in a reference picture; and performing motion compensation based on the interpolated reference picture (abstract; paras. 0070 and 0071), wherein said interpolating includes:

a first calculation step of calculating base values which are bases of sub-pixel values of the sub-pixels by multiplying coefficients with pixel values of pixels included in the

reference picture (paras. 0079-0083);

a first rounding step of deriving the sub-pixel values of the sub-pixels by rounding the base values calculated in said first calculation step instead of directly using the base values in calculating sub-pixel values of other sub-pixels (para. 0081; figs. 8 and 15), wherein

said performing of motion compensation includes performing motion compensation based on the reference picture having the interpolated sub-pixels with the correspondingly derived sub-pixel values (paras. 0070, 0071 and 0079-0083).

The subject-matter of claim 1 is therefore not new.

- 4 The above objection with respect to claim 1 applies *mutatis mutandis* to claims 12-19, which seem to effectively relate to the same subject-matter.
- 5 Dependent claims 2-11 do not seem to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, as they are either anticipated by the document D1 (see the passages cited in the search report) or relate to mere implementational details, obvious to the person skilled in the art.